3.3 Noise

This section of the EIR summarizes the Noise Impact Analysis for the Proposed Project, which was prepared by Urban Crossroads, Inc. (2008) and is contained in its entirety in Appendix F.

3.3.1 Discussion of Existing Conditions Relating to Noise

Noise can be simply defined as "unwanted" sound. Sound becomes unwanted when it interferes with normal activities, causes actual physical harm, or has adverse effects on health. Sound is measured on a logarithmic scale of sound pressure level known as a decibel (dB).

Noise Descriptors

Equivalent sound levels are not measured directly, but rather calculated from sound pressure levels typically measured in A-weighted decibels (dB[A]). A-weighted decibels approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum, and are adjusted to reflect only those frequencies that are audible to the human ear.

The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period.

The Community Noise Equivalent Level (CNEL) is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 dB to sound levels in the evening from 7 PM to 10 PM, and the addition of 10 dB to sound levels at night between 10 PM to 7 AM. These additions are made to the sound levels at these time periods because during the evening and night hours, with the decrease in overall amount and loudness of noise generated when compared to daytime hours, there is an increased sensitivity to sounds. For this reason the sound appears to be louder and it is weighted accordingly. The County relies on the CNEL noise standard to assess transportation-related impacts on noise sensitive land uses.

Traffic Noise Elements

The level of traffic noise depends on three primary factors: (1) the volume of the traffic; (2) the speed of the traffic; and (3) the number of trucks in the flow of traffic. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of traffic noise levels, a doubling of the traffic noise (acoustic energy) results in a noise level increase of three dB(A). Based on the FHWA community noise assessment criteria, this change is barely perceptible. The truck mix on a given roadway also has a significant effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

Existing Ambient Noise Levels

Existing Project area noise levels are affected by rural road traffic along Ash Street and Montecito Way, aircraft activity at the Ramona Airport, and various environmental sources such as birds and wind. Giroux & Associates conducted short-term noise measurements to establish ambient conditions on site on August 16, 2004 along each roadway segment analyzed in the TIA. Measurements were made with a digital sound level meter during the PM peak hour from 4:30 to 5:30 PM. Monitoring

experience has shown that the energy-averaged level (L_{eq}) during this time period approximates the 24-hour CNEL with ±one dB at 50 feet from each roadway centerline. The on-site measurement data are presented in Table 3.3-1. The posted speed limit on area roads is 40 mph. The traffic on Ash Street was traveling at 50 mph, but speeds varied because of frequent grade changes. The traffic along Montecito Way was traveling at 40 mph with some of the observed noise due to flight activity at Ramona Airport.

Given that the existing noise measurements along residential roadways (i.e., Ash Street, Montecito Way, and Montecito Road) summarized in Table 3.3-1 are near the 60 dB(A) L_{eq} San Diego County General Plan noise standard at 100 feet, it is inferred that this County noise standard is currently met on site, except when the receptor is in very close proximity to area roadways. The more stringent RCP standard of 55 dB(A) CNEL may already be exceeded at homes close to area roadways, even with light traffic volumes.

Ambient noise measurements and observed traffic conditions (i.e., traffic counts and the mix of cars, medium and heavy trucks) were used to calibrate the noise prediction model (FHWA-RD-77-108) to be used in predicting future noise levels. The results were consistent and therefore the computer model was determined to be an appropriate tool for evaluating future noise exposure for the Proposed Project.

The project vicinity was surveyed for any substantial stationary sources associated with current agricultural uses of the area. No audible stationary sources were found on four separate site visits.

Ramona Airport Noise Contours

The Project vicinity is potentially affected by single-event noise from Ramona Airport. The entire Project site is located in the secondary Airport Influence Area for the Ramona Airport and the southwestern portion of the site is within the primary Airport Influence Area (Figure 3.3-1). As shown in Figure 3.3-1, however, the Project site is located well outside (0.3 mile) the 55 dB(A) CNEL contour line associated with the airport.

Noise-sensitive Receptors in Project Area

Noise-sensitive receptors include land uses associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise. They typically include residential dwellings, dormitories, mobile homes, hotels, motels, hospitals, nursing homes, educational facilities (i.e., classrooms), and libraries. The subject Project site is currently undeveloped, with no noise-sensitive land uses existing on site. Noise-sensitive land uses in the vicinity of the Proposed Project consist of existing rural residences along Ash Street, Pine Street, Montecito Road, Montecito Way, and several of the proposed intersection improvement areas. Future residents of the Proposed Project also would be considered noise sensitive receptors.

Potential impacts to noise-sensitive wildlife are addressed in Subchapter 3.2, Biological Resources.

Applicable Plans and Policies

The County addresses two separate types of noise sources through the CEQA process: (1) mobile and (2) stationary. Transportation noise levels associated with Proposed Project development are regulated

by Policy 4b of the County Noise Element of the General Plan. Operational and construction noise levels are governed by the County Noise Ordinance Sections 36.404 and 36.410, respectively. The relevant sections of the Noise Element and Noise Ordinance are summarized below and provided in Appendix F.

County of San Diego Noise Element

The CNEL-based standards apply to exposure from transportation noise sources, such as on-road traffic, aircraft, trains, etc. Local jurisdictions are preempted by State or federal agencies from directly controlling these sources. Because the County cannot regulate the noise levels generated by such sources, it controls the land use decisions relative to exposure to such sources. That control is codified in the Noise Element of the County General Plan.

The County has adopted interior and exterior noise standards as part of the Noise Element for assessing the compatibility of land uses with transportation-related noise impacts. For assessing noise impacts to sensitive residential land uses, the County requires an exterior noise level of less than 60 dB(A) CNEL for outdoor living areas. The County also requires an interior noise standard of 45 dB(A) CNEL.

Off-site project impacts describe the off-site transportation-related noise associated with the development of a project. Noise level increases and impacts attributable to development of a project are estimated by comparing the "with project" ADT to the "without project" ADT. Noise impacts are considered significant if a project raises the noise levels above the County of San Diego 60 dB(A) CNEL standard, except if the existing noise level without project is 58 dB(A) or greater, a 3 dB(A) increase is allowed up to the maximum permitted by the Federal Highway Administration Standards.

The Noise Element standards require school rooms, which are usually occupied part of the day, not to exceed 50 dB L_{eq} as a one-hour average. Federal guidelines consider a one-hour average of 60 dB acceptable for outdoor recreation areas. This 60 dB L_{eq} standard would be more appropriate than the A-weighted 24-hour noise level standard (60 dB CNEL) for outdoor school activities such as assembly, lunch, or recreation areas.

Schools are considered sensitive receptors due to possible noise interference with instructional programs. Schools may also be noise generators, due to playground activities, school bells, competitive sports, marching band practices, and other activities.

Ramona Community Plan

The RCP imposes additional requirements on noise impacts to residential developments within the Project area. Chapter 6 of the RCP contains the following community-wide noise policies:

- Residential development proposed within projected CNEL contours of 55 dB(A) near main roads, airports, or other noise sources will be permitted only when noise impacts can be mitigated.

- New development proposed within projected noise contours exceeding a 55 dB(A) CNEL will require buffering or other mitigation devices to return the ambient noise level to 55 dB(A) CNEL or less.

County Noise Ordinance

Section 36.404 of the County Noise Ordinance provides performance standards and noise control guidelines for determining and mitigating non-transportation (stationary) noise source impacts to residential properties. The purpose of the noise ordinance is to protect, create, and maintain an environment free from noise and vibration that may jeopardize the health or welfare, or degrade the quality of life.

According to the stationary source exterior noise standards, no person shall operate any source of sound at any location within the County or allow the creation of any noise on a property that causes the noise levels to exceed the exterior noise limits at the property boundary within all non-industrial zones. The Noise Ordinance sets an exterior noise limit for residential land uses adjacent to the property at 50 dB(A) L_{eq} for daytime hours from 7 a.m. to 10 p.m. and 45 dB(A) L_{eq} during the noise sensitive nighttime hours from 10 p.m. to 7 a.m.

Section 36.410 of the County Noise Ordinance controls construction equipment noise. The hours of construction are restricted to less sensitive times of the day and week and establishes a 75 dB(A) L_{eq} standard between 7 a.m. and 7 p.m. Monday through Saturday at the property line of off-site residences during on-site construction. The County Noise Ordinance also states that no person shall operate any construction equipment so as to cause an average sound level greater than 75 dBA at or beyond the property line of any property upon which a legal dwelling unit is located.

3.3.2 Identification and Discussion of Guidelines for the Determination of Significance

A significant noise impact would occur if Project implementation would:

1. Result in Project-generated, non-transportation noise that exceeds the standards of the County Noise Ordinance (Section 36.404) at or beyond the property line.

2. Expose noise sensitive land uses to construction noise levels exceeding 75 dB(A) L_{eq}.

3. Result in interior noise levels within existing or proposed homes that exceed 45 dB(A) CNEL per State Title 24 standards and the County Noise Element; and result in an exterior noise level exceeding 60 dB(A) CNEL adjacent to the homes.

4. Result in the exceedance of 55 dB(A) CNEL (per the Ramona Community Plan) in any outdoor usable space for the proposed homes, due to anticipated noise from sources including but not limited to roads and airports.

5. Expose on- or off-site, existing or planned noise sensitive areas (NSAs) to road, railroad, airport, or heliport noise in excess of 60 dB(A) CNEL.

6. Expose on- or off-site existing NSAs to an increase of 10 dB(A) CNEL or more over existing noise levels.

7. Increase noise levels, such that any of the following guidelines for significance are exceeded:
   a. Project implementation would expose off-site, existing or planned, NSAs with existing noise levels in excess of 58 dB(A) CNEL to road transportation noise level increases of more than 3 dB(A) CNEL
   b. The on-site noise generated by the Proposed Project would increase noise levels at or beyond the property line by 1 or more dB(A) (one-hour average L_{eq}); or
   c. Project implementation would expose existing or planned, future NSAs to airport, heliport, or railroad noise 1 dB(A) CNEL over existing noise levels.

8. Result in an exterior noise level of 60 dB(A) CNEL or an interior noise level of 50 dB(A) CNEL at existing or proposed schools, per the County Noise Element.

Guideline Sources/Methodology

The identified noise guidelines are based on Appendix G of the State CEQA Guidelines, State Noise Insulation Standards, State Building Code, County General Plan, Ramona Community Plan, County of San Diego Guidelines for Determining Significance, County Noise Ordinance, and County staff guidance.

Guideline Nos. 1, 2, 4, and 5 are derived from existing local noise standards, which in turn are derived from State regulations addressing human health and quality of life concerns. Specifically, Guideline Nos. 1 and 2 are related to noise generation from and exposure to mobile and/or stationary equipment sources, and are based on Sections 36.404 (Sound Level Limits) and 36.410 (Construction Equipment) of Title 3, Division 6, Chapter 4 (Noise Abatement and Control) of the San Diego County Code of Regulatory Ordinances. Guideline No. 4 is based on the Ramona Community Plan. Guideline No. 5 is based on Policy 4b of the San Diego County General Plan Noise Element, which establishes local noise standards for NSAs.

Guideline Nos. 3, 6, and 8 are taken from the County of San Diego Guidelines for Determining Significance, Part XV-A: Transportation/Traffic, adopted by DPLU on September 26, 2006 Guideline No. 7 is intended to provide additional guidance if existing noise levels already exceed the applicable guidelines for significance set forth above.

3.3.3 Analysis of Project Effects and Determination as to Significance

The discussion below addresses noise impacts from the operation of construction equipment, addition of vehicular traffic, and operation of the proposed sewer pump stations and WRF.

Construction Noise Impacts (Significance Guideline Nos. 1 and 2)

Temporary construction noise impacts would vary markedly because the noise strength of construction equipment ranges widely as a function of both the equipment used and its activity level. Short-term construction noise impacts tend to occur in discrete phases dominated initially by earth-moving sources, then by foundation and street construction, and finally by finish construction. In addition, off-site road construction and the installation of utility connections would produce short-term construction noise. Table 3.3-2 shows the typical range of construction activity noise generation as a function of equipment type used during various building phases.

For typical residential development projects, earth-moving equipment such as graders and scrapers are considered to be the noisiest sources, with noise ranging up to about 90 dB(A) at a distance of 50 feet from the source. Measurements indicate that the noise generation levels shown in Table 3.3-2 tend to be associated with periodic events under full load rather than chronic (hourly or longer) noise exposure. Short-term noise generation tends to be on the high end of the noise range shown in Table 3.3-2, while longer term or sustained exposure is associated with lower noise levels. Therefore, for major earth-moving equipment, short-term noise peaks near 90 dB(A) and sustained levels are typically closer to 80 dB(A) at a distance of 50 feet from the equipment.

As noted above under Existing Conditions, construction noise and activities are regulated by Section 36.410 of the San Diego County Code (i.e., the Noise Ordinance). The County Noise Ordinance limits hours of construction operations to less noise-sensitive periods of the day and week (i.e., Monday through Saturday, 7 a.m. to 7 p.m.), and establishes a noise performance standard of 75 dB(A) at the nearest residence property line to any construction activity. The nearest residence to the Montecito Ranch site, near Ash Street and Alice Street, is located approximately 200 feet from the closest area of proposed residential construction. If all proposed construction equipment were used at once at this location, they would generate a noise level of 90.3 dB(A) at 50 feet (and would comply with the County's 75 dB[A] threshold at a distance of 300 feet or more). Equipment, however, is expected to be spread out around the Project site. Therefore, it is anticipated that noise levels would be lower than 75 dB(A) at 300 feet. It is possible, nonetheless, that a significant impact may occur to residences closer to equipment use than 300 feet, pursuant to Significant Guideline Nos. 1 and 2. **(Significant Impact No. 3.3.3a)**

There also may be some short-term operation of equipment near already completed homes in later phases of construction; however, such activities generally do not involve heavy grading equipment and the 75 dB (L_{eq}) standard is normally met within the construction site.

Off-site improvements such as sewer or water pipeline placement, or roadway improvements, generally use quieter equipment than large dozers or scrapers used in mass grading. They tend to be located at one locale for shorter periods, and often do not operate at full power for a long duration. Table 3.3-2 shows that a backhoe, the most common piece of construction equipment used for linear utility installation, has short-term noise levels in the 80 to 90 dB range at 50 feet from the source. The hourly average noise would therefore be about 80 dB. A semi-stationary pipeline project could have a 60 dB L_{eq} contour that similarly extends to 500 feet from the maximum excavation area. There is the potential for significant temporary construction noise impacts upon residences located adjacent to the proposed off-site road and utilities improvements (i.e., along Ash Street, Pine Street, Montecito Way, Montecito Road, Kalbaugh Street, and several of the proposed intersection improvement areas), pursuant to Significance Guideline No. 2. **(Significant Impact No. 3.3.3b)**

Additionally, if noise-sensitive, threatened or endangered avian species (e.g., gnatcatchers) are present, County policy is to maintain peak one-hour noise levels of 60 dB L_{eq} or less during construction or operation during the nesting/breeding season consistent with wildlife management agency requirements. Refer to Subchapter 3.2, Biological Resources, for additional details about potential impacts and mitigation for impacts to sensitive bird species.

Project-related Vehicular Noise Impacts (Significance Guideline Nos. 3 through 8)

The following text evaluates increased traffic noise along existing and future roadways in the Project area and its effect on existing and proposed residences.

The Proposed Project would generate 5,885 daily trips as noted in Table 2.1-4 in Subchapter 2.1, Transportation/Circulation, of this EIR. Project traffic would be distributed in several directions and those added vehicles would increase traffic noise levels. To estimate future noise levels associated with this increase in vehicular traffic, Urban Crossroads ran the federal roadway noise model (FHWA Highway Traffic Noise Prediction Model, FWHA-RD-77-108). The distances from centerline to the San Diego County noise/land use standard for residential uses (60 dB[A] CNEL), and the more stringent RCP standard of 55 dB(A) CNEL for residential use were calculated. Traffic noise levels in the Project area were calculated for specified sets of traffic conditions (e.g., auto/truck mixes, traffic speeds, and day/night distributions). Traffic mix parameters were determined for "light collector" and "State Highway" roadways in the Project vicinity. Detailed traffic input parameters are contained in Appendix F of this EIR. Table 3.3-3 shows the distance to the 55, 60, 65, and 70 dB(A) CNEL contours from the centerlines of analyzed roadways. Table 3.3-4 shows the changes in noise levels at 100 feet from roadway centerline along affected roadways for existing plus Project traffic conditions.

Montecito Ranch Residences

On-site noise levels are projected to exceed the RCP noise standard of 55 dB(A) CNEL for the exterior usable areas of proposed homes closest to Montecito Ranch Road. On-site noise exposures were calculated for the lot layout and preliminary grading plan prepared by Stevens-Cresto Engineering dated 2008. It was assumed that the peak hour L_{eq} (at 10 percent of ADT) was equivalent to CNEL. The Sound32 computer model was used to calculate rear or side yard noise exposure without any walls erected along the northern edge of Montecito Ranch Road. The calculated CNEL at 15 representative lots is shown in Table 3.3-5. Rear and side yard receivers were initially analyzed without any rear yard walls. Any receiver at grade with the roadway was assumed to represent a worst-case condition. As shown in Table 3.3-5, the rear yards at five of these lots would meet the County exterior standard (60 dB[A] CNEL) without any noise walls.

Based on an acoustically "hard" surface assumption, noise generated by 2030 with Project traffic may cause the 55 dB(A) CNEL contour to extend a distance of approximately 500 feet from the centerline of Montecito Ranch Road. The construction of an estimated 88 Montecito Ranch homes (on lots 1 through 8, 119, 120, 144, 145, 148 through 166, 235 through 244, 250 through 260, 268 through 275, 376, 377, 389 through 397, 398 through 400, and 412 through 425) within the anticipated 55 dB(A) CNEL contour (for both first and second stories) would result in a significant noise impact to these homes, pursuant to Significant Guideline Nos. 3 and 4. **(Significant Impact No. 3.3.3c)**

The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. Typical building construction provides a noise reduction of approximately 12 dB(A) with the windows open and 20 dB(A) with the windows closed. Because the exterior noise levels would be greater than 55 dB(A) CNEL, the interior levels also would be greater than the 45 dB(A) CNEL threshold established by the County. Impacts to the interior of proposed homes along Montecito Ranch Road therefore also would be significant, pursuant to Significance Guideline No. 3. **(Significant Impact No. 3.3.3d)**

SR 78 is located at least 700 feet distant and approximately 150 feet below grade from the proposed residential development on the Project site. Therefore, it is anticipated that noise associated with traffic on SR 78 would be **less than significant**.

Off-site Residences

Near-term Project traffic noise levels are estimated to be 58.9 dB(A) CNEL within 100 feet of the Ash Street centerline between the eastern Project access point and Pine Street (Table 3.3-3). The 60 dB CNEL contour would be 84 feet from the centerline and would encompass portions of five homes with limited roadway setbacks. Along Montecito Way, the worst-case 60 dB(A) CNEL contour for the "with Project" condition would be 95 feet from the centerline. Nine homes are located within this distance from the centerline. Because the affected residences face the roadway and have rear yard areas protected by the homes, exterior noise levels would not be excessive (greater than 60 dB[A] CNEL) where the outdoor usable open space or recreational space occurs behind the houses. Therefore, no significant impacts to exterior noise levels were identified. Potentially significant noise impacts would occur if noise from passing vehicles would increase residential interior noise levels to 45 dB(A) CNEL or greater. Interior noise levels in buildings with standard stucco wall construction and closed windows/air conditioning are approximately 20 dB(A) lower than exterior noise levels. Even with open windows, a reduction of 12 dB(A) can be achieved. As a result, if exterior noise levels at a home are projected to be greater than 60 dB(A), it can be inferred that the interior noise level would be greater than 45 dB(A) CNEL and therefore comprise a significant impact.

The noise study analyzed the potential for significant interior noise levels to the 14 houses within the 60 dB(A) CNEL contours along Ash Street and Montecito Way. Taking into account intervening topography and landscaping, noise levels at 12 of the 14 houses would be 60 dB(A) CNEL or less; therefore, impacts would be **less than significant** at these 12 homes. The remaining two homes along Montecito Way would have an exterior noise level greater than 60 dB(A) CNEL. Accordingly, interior noise levels are anticipated to be greater than 45 dB(A) CNEL at these two residences and therefore significant, pursuant to Significance Guideline No. 3. **(Significant Impact No. 3.3.3e)**

As shown in Table 3.3-4, the Project-only traffic noise increment outside the Project site is 2.0 dB or less on all roadways where exceedance of 58.0 dB(A) CNEL is the current condition, except along Ash Street west of Pine Street and Montecito Way. Pursuant to Significance Guideline Nos. 6 and 7a, impacts would be **less than significant**, because noise levels with the Project would not rise more than 3.0 dB(A) CNEL along these segments and would not rise 10 dB(A) CNEL along segments with dB below 58 dB(A) CNEL (including segments of Montecito Way and Ash Street).

Future On-site Charter High School

The proposed charter high school site is situated on a 10.6-acre parcel and is not adjacent to the proposed residential uses. Therefore, any impacts would be from the environment acting upon the charter high school, not the school upon the environment. Future traffic noise levels along the proposed Montecito Ranch Road, which would be adjacent to the charter high school site, are projected to be 64.0 dB(A) CNEL at 50 feet from the roadway centerline, 59.5 dB(A) CNEL at 100 feet from the centerline, and 55 dB(A) CNEL at 200 feet from the centerline without any barriers and assuming "hard" surface conditions. The charter high school's layout is unknown at this time, however, the Proposed Project would not preclude the use of noise barriers, building setbacks, site layouts, and other school design measures to achieve acceptable noise levels within lunch, assembly, and recreation areas located within approximately 100 feet from the immediate roadway. At this distance, traffic noise impacts to the school would be **less than significant**.

As previously discussed, interior noise levels in buildings with standard stucco wall construction and closed windows/air conditioning are approximately 20 dB(A) lower than exterior noise levels. Even with open windows, a reduction of 12 dB(A) can be achieved. Based on the worst-case assumption that peak hour L_{eq} would equal CNEL, interior noise levels for classrooms at 200 feet from centerline with open windows would be 43 dB CNEL, which would meet San Diego County standards. Use of air conditioning and closed windows would create a substantial additional margin of compliance. Accordingly, impacts would be **less than significant**.

Sewer and Water Pump Station Impacts (Significance Guideline Nos. 3 through 5)

The Proposed Project would include three underground sewer pump stations within the Project site under Wastewater Management Option 1 (two pump stations under Option 2), each containing two pumps in a dry pit adjacent to an underground wet well. Noise monitoring at similar underground sewer lift stations has determined that noise levels are typically less than 45 dB(A) L_{eq} at a distance of 15 feet while the pump is running. This noise level would meet the most stringent County Noise Ordinance standard within the property line of each pump station. Pump stations typically include emergency generators, which have the potential to generate 79 dB(A) L_{eq} at a distance of 50 feet when mounted above ground.

The anticipated distance between the emergency generator and the nearest residential property line is approximately 50 feet at each of the two sewer pump stations within the residential development. At this distance, generator noise levels would be approximately 63 dB(A), which would result in significant impacts to adjacent residences, pursuant to Significance Guidelines Nos. 3 through 5. **(Significant Impact No. 3.3.3f)**

Reduction of generator noise by an additional 8 dB would be required at the nearest residential property line to meet the County's 55 dB(A) L_{eq} residential noise ordinance standard during generator testing.

Under Wastewater Management Option 1, a sewer pump station also would be located in the equestrian staging/overflow parking area within the historic park site. This pump station would be a minimum of 200 feet northwest of the nearest residence and 300 feet southwest of the school. At this distance, noise impacts from the pump station would be **less than significant**.

In addition, an aboveground water booster pump station and surge tank would be constructed in the northwestern corner of the Montecito Way/Montecito Road intersection. This pump station would be approximately 90 feet away from the closest residence and may potentially result in significant impacts, pursuant to Significance Guidelines Nos. 3 through 5. **(Significant Impact No. 3.3.3g)**

Analysis of Effects Associated With SA 330 Extension

This analysis is applicable only to the projected extension of SA 330 from Montecito Road to SR 67. Buildout of this roadway is not part of the Proposed Project, but would be implemented by another entity in the future.

Appendix Q of this EIR provides noise modeling for the relocated SA 330 extension. Along the extension, noise levels of 56.4 dB(A) CNEL under current conditions and with Montecito Ranch traffic could be generated at 100 feet from centerline. Impacts to the two homes within 180 feet of the centerline, as well as homes further away, would be less than significant. No other sensitive receptors are located along the proposed alignment. Therefore, no existing noise sensitive land uses would be

exposed to noise levels exceeding the County standard of 60 dB CNEL along the relocated SA 330 extension for existing conditions and noise impact would be **less than significant**. The reader is referred to Section 5.8.6, Extension of SA 330 Design Scenario Alternative, for additional analysis associated with the construction of the SA 330 extension.

3.3.4 Cumulative Impact Analysis

Project-generated noise primarily would be associated with Project-related traffic. The cumulative study area identified for the Proposed Project, therefore, incorporates other projects for which projected traffic volumes would affect area roads also affected by the Proposed Project; and specifically includes the following streets: Pine Street, 10th Street, Main Street, Montecito Way, Montecito Ranch Road, Ash Street, and Montecito Road. The cumulative projects that would generate traffic in the Project vicinity are identified in Chapters 9.0 and 11.0 of the TIA. The cumulative traffic volume noise is based upon the projected volumes in the TIA, assuming implementation of the Proposed Project and other cumulative projects.

The noise impact analysis performed for the Proposed Project (Appendix F) conducted a comparison between existing noise levels and existing plus Project plus cumulative project noise levels to evaluate whether cumulative noise impacts would occur as a result of Project implementation in conjunction with other related projects proposed in the community. As shown in Tables 3.3-6 and 3.3-7 and discussed above under "Project-related Vehicular Noise Impacts," no roadways (with the exception of Montecito Way and segments of Ash Street and 10th Street) would experience direct Project-related noise level increases greater than three dB CNEL under cumulative conditions. Existing noise levels along Ash Street (west of Pine Street) and Montecito Way would not increase from the existing plus Project conditions with the addition of the cumulative projects. Cumulative traffic growth would not expand the 60 dB(A) CNEL contour along Ash Street or Montecito Way. Taking into account intervening topography and landscaping, noise levels at the houses along Ash Street would be 60 dB(A) CNEL or less. The remaining two homes along Montecito Way would have an exterior noise level greater than 60 dB(A) CNEL under direct Project impacts. Significant impacts to Montecito Way would therefore be only direct (refer to Significant Impact No. 3.3.3e, above), and not cumulative; cumulative impacts would be **less than significant**.

Cumulative impacts, however, would occur to NSAs within the 60 dB(A) CNEL contour line along 10th Street between Main Street and H Street. The 60 dB(A) CNEL contour line along this roadway segment is 566 feet from the centerline (Table 3.3-6). Existing noise along this street segment is 62.8 dB(A) within 100 feet. The cumulative noise level increase totals 4.3 dB(A) CNEL (Table 3.3-7). The Proposed Project direct effect would be an additional 0.4 dB(A) CNEL (Table 3.3-4). Without buildout of the Project, it can be extrapolated that the cumulative noise levels would be 3.9 dB(A) CNEL. Significant cumulative impacts, therefore, would occur regardless of whether the Proposed Project is constructed. The Project's contribution to cumulative impacts along 10th Street would be less than 1 dB. The contribution to cumulative impacts associated with the Proposed Project would therefore be less than considerable and **less than significant**, pursuant to Significance Guideline No. 7.

Project construction, pump station, and/or school noise would **not contribute to significant cumulative impacts** due to intervening distance and topography between these Project noise sources and other proposed developments in the community.

3.3.5 Effects Found Not to be Significant (Ramona Airport and WRF)

Ramona Airport (Significance Guideline Nos. 4, 5, and 7)

The Proposed Project is well outside (approximately 0.3 mile) the 55 dB(A) CNEL contour for the Ramona Airport. Extrapolation of the airport contours from the Draft Ramona Airport Land Use Compatibility Plan shows that on-site noise levels related to the airport are likely less than 50 dB CNEL. Therefore, noise produced by the aircraft operations would be **less than significant**, pursuant to Significance Guideline Nos. 4, 5, and 7.

WRF (Significance Guideline Nos. 1, 3, and 7)

Potential noise impacts associated with the WRF under Wastewater Management Option 2 would be from the control/operations building, process area, and dewatering/equipment. The noise levels associated with the operations of the WRF are based on an approved study for Harmony Grove Village (Pacific Noise Control 2006). The design capacity for the Harmony Grove Village WRF was approximately 230,000 gpd (the Proposed Project would be 110,000 gpd); therefore, the size/capacity of the operation facilities assumed to serve Harmony Grove would exceed those required for the Project WRF and can be considered worst case.

The control building would be a concrete building that would include an air compressor and an approximately 200 kW standby diesel generator room (Dexter Wilson 2006). The odor control facility may also be part of the operations building and would consist of approximately four fans and 10 hydropneumatic pumps. The generator would be located inside a masonry block building with louver openings on one side of the building. The noise levels produced by the generator can range from 58 to 77 dB(A), depending on the orientation of the building and the location of the louvers. According to the Project Applicant, the louvers would be placed on the side of the building facing Montecito Ranch Road, and therefore positioned away from the closest off-site residences. The noise levels produced by the equipment in this building would be approximately 67.0 dB(A) at 25 feet. The process area would be an outdoor structure that would include aeration basins, clarifiers, flow equalization and aerobic digester. Headworks equipment also would be located in the process area and would include a rotary screen powered by a small motor. This equipment would generate a noise level of up to approximately 50.0 dB(A) at a distance of 25 feet. The dewatering equipment would be housed within a concrete building and would include a centrifuge, two sludge pumps, and two blowers. With the typical noise attenuation of a concrete building, this equipment would generate a noise level of up to approximately 55.5 dB(A) at a distance of 25 feet. Impacts associated with noise from the control building, process area, and dewatering equipment to the residences and the future school would be **less than significant**, as they are more than 200 feet away from the WRF site, with associated noise levels dropping below the 55 dB(A) threshold.

The Project proposes two pump stations that would be located in the process area of the WRF. Each pump station has a 100,000-gallon per day capacity. According to the Project Applicant, there are two options for the design of the pump stations. The first option consists of two submerged pump stations containing two pumps each. Based on a similar underground pump station, the pumps would generate a noise level of 45 dB(A) L_{eq} at a distance of 15 feet from the access hatch. The second option includes one submerged pump station and one above-grade pump station, each with two pumps. The underground pump station would generate a noise level of 45 dB(A) L_{eq} at a distance of 15 feet from the access hatch. The above-grade pump station would be located in a prefabricated enclosure.

Urban Crossroads took measurements of a similar pump station, which had a noise level of 58.1 dB(A) L_{eq} at a distance of 25 feet. Impacts to the residences and the future school would be **less than significant**, as they are more than 200 feet away from the WRF site, where noise levels would be below the 55 dB(A) threshold.

In summary, the County Noise Ordinance sets an exterior noise limit for residential land uses adjacent to the property of 50 dB(A) L_{eq} for daytime hours (7 a.m. to 10 p.m.) and 45 dB(A) L_{eq} during the noise sensitive nighttime hours of 10 p.m. to 7 a.m. The proposed WRF is located approximately 325 feet from the nearest existing residential property line. With the proposed facility orientation (i.e., the quietest side of the power generator facing the closest off-site residences), the noise level at the property line would be 45.0 dB(A) (refer to Table 3.3-8). This noise level would not exceed the County Noise Ordinance criteria; therefore, impacts are identified as **less than significant**. If the option of two underground pump stations is utilized, the noise level would be further reduced.

As described in Section 3.3.4, Cumulative Impact Analysis, all cumulative noise impacts would be less than significant, including cumulative impacts to homes along roadways, and noise associated with project construction, pump stations, and/or the future school.

3.3.6 Mitigation Measures Proposed to Minimize the Significant Effects

Mitigation for Significant Impact Nos. 3.3.3a and 3.3.3b

The following measures are required to mitigate Project impacts from construction noise to below a level of significance:

- All construction equipment shall use properly operating mufflers.
- All construction staging shall be performed as far as possible from occupied dwellings.
- Anticipated heavy equipment operations for full workdays within 300 feet of any occupied dwelling shall require a noise control plan that either ensures that the residence is unoccupied during the workday or reduces the hours of allowable operation such that the 75 dB(A) CNEL noise standard is met. Alternatively, temporary, movable barriers could be utilized to mitigate noise impacts to residents adjacent to the proposed off-site road and utilities improvements.

Mitigation for Significant Impact Nos. 3.3.3c and 3.3.3d

The following measures are required to mitigate Project vehicle noise impacts to proposed on-site residences to below a level of significance:

- A six-foot high solid barrier shall be constructed on the southern property line of all Project lots that have a Montecito Ranch Road frontage. The barrier's weight must be at least 3.5 pounds per s.f. of face area and have no decorative cutouts or line-of-sight openings between the houses and Montecito Ranch Road. All gaps (except for weep holes) shall be filled with grout or caulking. The barrier may be constructed using one of the following alternative materials: (1) masonry block; (2) stucco veneer over wood framing (or foam core) or one-inch thick tongue and groove wood of sufficient weight per s.f.; (3) glass (0.25-inch thick) or other transparent material with sufficient weight per s.f.; (4) earthen berm; or (5) any combination of these construction materials.

- On the Final Map, the Project Applicant shall grant to the County of San Diego a noise protection easement over the entire area of lots 1 through 8, 119, 120, 144, 145, 148 through 166, 235 through 244, 250 through 260, 268 through 275, 376, 377, 389 through 397, 398 through 400, and 412 through 425 inclusive of VTM 5020RPL[5]. This easement is for the mitigation of present and anticipated future noise levels on residential uses of the affected parcels. The easement shall require:

  Prior to the issuance of any building permit for any residential use within the noise protection easement, the Project Applicant shall:

  - Complete to the satisfaction of the Director of DPLU, an acoustical analysis performed by a County-approved acoustical engineer, demonstrating that the present and anticipated future noise levels for the interior and exterior of the residential dwelling will not exceed the allowable sound level limit of the Noise Element of the General Plan (60 dB[A] CNEL exterior and 45 dB[A] CNEL interior) and the RCP (55 dB[A] CNEL exterior). Future traffic noise level estimates for Montecito Ranch Road must utilize an LOS C traffic flow for a rural light collector road classification, which is the designated General Plan Circulation Element buildout roadway classification.
  - Incorporate to the satisfaction of the Director of DPLU all of the recommendations or mitigation measures of the acoustical analysis into the project design and building plans.

Mitigation for Significant Impact No. 3.3.3e

- Four-foot high solid noise walls shall be placed on private property in front of the two houses that would be significantly impacted by traffic noise (refer to Figure 3.3-2 for wall locations). If an agreement cannot be reached between the Applicant and the affected property owners, the noise walls shall be constructed within the right-of-way along Montecito Way or the roadway will be paved with rubberized asphalt in front of the homes and extending 300 feet north and south beyond the homes. If walls are constructed, the northernmost wall will be approximately 90 feet long and the southernmost wall will be 80 feet long. The barrier's weight must be at least 3.5 pounds per s.f. of face area and have no decorative cutouts or line-of-sight openings between the houses and Montecito Way. All gaps (except for weep holes) shall be filled with grout or caulking. The barrier may be constructed using one of the following alternative materials: (1) masonry block; (2) stucco veneer over wood framing (or foam core) or one-inch thick tongue and groove wood of sufficient weight per s.f.; (3) glass (0.25-inch thick) or other transparent material with sufficient weight per s.f.; (4) earthen berm; or (5) any combination of these construction materials.

Mitigation for Significant Impact No. 3.3.3f

- The pump station emergency generators shall be located in a cinder-block building that utilizes acoustical louvers to decrease the noise level at the adjacent residential property lines. The louvers shall be placed on the vent openings on the northern side of the building. The sides of the building facing east, south, and west are required to be completely free of any openings or ventilation.

- Once construction of the pump stations is completed and the pump stations are fully operational, a site-specific analysis shall be prepared to determine if additional measures are required to meet the property line noise standards.

Mitigation for Significant Impact No. 3.3.3g

- Prior to operation of the water booster pump station, a qualified acoustician shall verify that the emergency generator designs feature setbacks, quieter equipment, noise-attenuating enclosures, and/or reduced test times to prevent the daytime residential standard of 50 dB(A) L_{eq} from being exceeded.

3.3.7 Conclusion

Significant direct noise impacts due to construction (Significant Impact Nos. 3.3.3a and 3.3.3b) are expected during development of the Proposed Project. Implementation of mitigation measures outlined above would reduce the Project impacts to less than significant levels.

Project-generated traffic would result in significant impacts to an estimated 88 proposed homes along Montecito Ranch Road within the 55 dB(A) CNEL contour (Significant Impact No. 3.3.3c). In addition, interior noise levels may exceed the significance threshold within these homes (Significant Impact No. 3.3.3d). A noise protection easement would be established and a six-foot high noise wall would be constructed along Montecito Ranch Road to protect proposed residences, which would reduce impacts to less than significant levels.

Four-foot high noise walls are proposed along the front portion of two properties along Montecito Way that would be significantly impacted by interior noise levels due to increased traffic (Significant Impact No. 3.3.3e). The Project Applicant is required to obtain an agreement with the property owners of those two homes to allow construction of the noise walls. If an agreement cannot be reached, the noise walls would be placed within the right-of-way of Montecito Way or the roadway will be paved with rubberized asphalt in front of the homes and extending 300 feet north and south beyond the homes. Construction of noise walls or use of rubberized asphalt would reduce impacts to less than significant levels.

Mitigation measures described above would reduce impacts from sewer and water booster pump stations (Significant Impact Nos. 3.3.3f and 3.3.3g).

Implementation of the proposed mitigation would ensure compliance with the County Noise Ordinance. The purposes of the Noise Ordinance include controlling disturbing, offensive and excessive noise, providing an environment in which noise is not detrimental to life, health and enjoyment of property and "securing and promoting the public health, comfort, convenience, safety, welfare, prosperity, peace and quiet of the County of San Diego and its inhabitants" (County Code Sections 36.401(b), (d), and (e)). Compliance with Noise Ordinance limits would ensure that noise generated on and off the Project site would fall within the decibel levels specified in the ordinance. This would comprise effective mitigation as the decibel level standards specified in the ordinance are those generally found to be compatible with abutting sensitive receptors within the contour. This measure would adequately minimize disturbance to on-site residences or properties along Montecito Way.

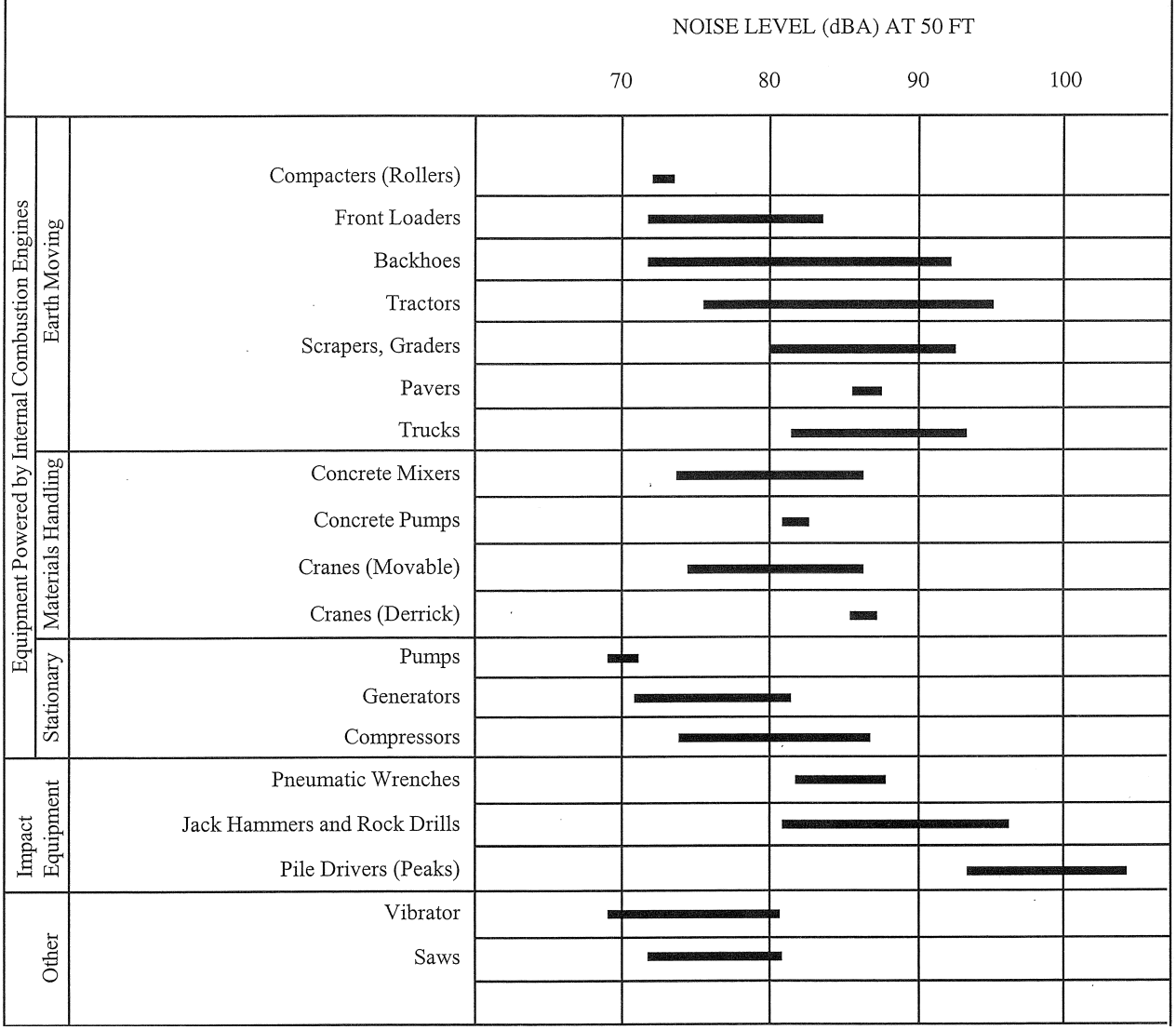
Cumulative impacts would occur to NSAs within the 60 dB(A) CNEL contour line along 10th Street between Main Street and H Street. Significant cumulative impacts, however, would occur regardless of whether the Proposed Project is constructed. Accordingly, the Project's contribution to cumulative impacts along 10th Street would be less than significant.

Table 3.3-1
EXISTING NOISE CONTOURS

Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Pine Street	Haverford Road to Ash Street	65.1	36	114	360	1,137
	Ash Street to Olive Street	65.4	38	120	378	1,196
	Olive Street to Main Street	65.6	40	125	397	1,254
10th Street	Main Street to H Street	62.8	21	67	212	669
Main Street	7th Street to 3rd Street	72.1	178	561	1,775	5,614
	10th Street to Montecito Road	73.1	225	711	2,248	7,108
	Montecito Road to Hunter Street	72.8	208	658	2,080	6,578
	Hunter Street to future Boundary Road	69.6	100	317	1,001	3,165
	Future Boundary Road to Highland Valley Road	69.6	100	317	1,001	3,165
	Highland Valley Road to Archie Moore Road	69.1	89	281	890	2,813
	Archie Moore Road to Poway Road	69.3	93	293	927	2,931
Montecito Way	Montecito Road to Montecito Ranch Road	52.2	2	6	18	57
Montecito Ranch Road	Western Project access point to Montecito Way	DNE				
	Between main Project access points	DNE				
Ash Street	Eastern Project access point to Pine Street	51.4	2	5	15	48
	Pine Street to Elm Street	51.4	2	5	15	48
Montecito Road	Montecito Way to Davis Street	59.8	11	33	106	335
	Davis Street to Main Street	62.2	18	57	181	574

Source: Urban Crossroads 2008
DNE = does not exist

Table 3.3-2
TYPICAL CONSTRUCTION EQUIPMENT NOISE GENERATION LEVELS



Source: EPA PB 206717, Environmental Protection Agency, December 31, 1971, "Noise from Construction Equipment and Operations."

Table 3.3-3
EXISTING PLUS PROJECT CONDITIONS NOISE CONTOURS

Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Pine Street	Haverford Road to Ash Street	65.3	37	117	370	1,172
	Ash Street to Olive Street	66.1	45	141	446	1,409
	Olive Street to Main Street	66.1	45	141	447	1,413
10th Street	Main Street to H Street	63.2	23	73	231	731
Main Street	7th Street to 3rd Street	72.1	180	569	1,798	5,685
	10th Street to Montecito Road	73.2	230	728	2,302	7,279
	Montecito Road to Hunter Street	73.0	221	699	2,210	6,989
	Hunter Street to future Boundary Road	69.8	106	334	1,055	3,337
	Future Boundary Road to Highland Valley Road	69.8	106	334	1,055	3,337
	Highland Valley Road to Archie Moore Road	69.3	93	294	929	2,938
	Archie Moore Road to Poway Road	69.4	96	303	959	3,034
Montecito Way	Montecito Road to Montecito Ranch Road	59.3	9	30	95	299
Montecito Ranch Road	Western Project access point to Montecito Way	59.3	9	30	95	299
	Between main Project access points	57.5	6	20	62	197
Ash Street	Eastern Project access point to Pine Street	58.9	8	27	84	267
	Pine Street to Elm Street	52.7	2	6	20	65
Montecito Road	Montecito Way to Davis Street	61.8	17	53	168	532
	Davis Street to Main Street	63.4	24	76	240	759

Source: Urban Crossroads 2008

Table 3.3-4
PROJECT CONTRIBUTIONS TO EXISTING NOISE LEVELS

Road	Segment	CNEL at 100 Feet (dBA)		
		Existing	Existing Plus Project	Project Contribution
Pine Street	Haverford Road to Ash Street	65.1	65.3	0.1
	Ash Street to Olive Street	65.4	66.1	0.7
	Olive Street to Main Street	65.6	66.1	0.5
10th Street	Main Street to H Street	62.8	63.2	0.4
Main Street	7th Street to 3rd Street	72.1	72.1	0.1
	10th Street to Montecito Road	73.1	73.2	0.1
	Montecito Road to Hunter Street	72.8	73.0	0.3
	Hunter Street to future Boundary Road	69.6	69.8	0.2
	Future Boundary Road to Highland Valley Road	69.6	69.8	0.2
	Highland Valley Road to Archie Moore Road	69.1	69.3	0.2
	Archie Moore Road to Poway Road	69.3	69.4	0.2
Montecito Way	Montecito Road to Montecito Ranch Road	52.2	59.3	7.2
Montecito Ranch Road	Western Project access point to Montecito Way	DNE	59.3	-
	Between main Project access points	DNE	57.5	-
Ash Street	Eastern Project access point to Pine Street	51.4	58.9	7.5
	Pine Street to Elm Street	51.4	52.7	1.3
Montecito Road	Montecito Way to Davis Street	59.8	61.8	2.0
	Davis Street to Main Street	62.2	63.4	1.2

Source: Urban Crossroads 2008
DNE = does not exist

Table 3.3-5
EXTERIOR NOISE LEVELS OF PROPOSED HOMES ALONG MONTECITO RANCH ROAD

Receptor[1]	Unmitigated Ground Floor Exterior Noise Level (dBA CNEL)	Mitigated Ground Floor Exterior Noise Level (dBA CNEL)	Barrier Height (in feet)[2]
1	63.3	50.4	6.0
2	63.4	45.6	6.0
3	63.2	44.9	6.0
4	61.8	54.1	6.0
5	61.9	55.1	6.0
6	62.2	52.9	6.0
7	61.3	54.1	6.0
8	63.1	55.4	6.0
9	60.5	53.8	6.0
10	59.6	51.1	6.0
11	50.4	44.6	0.0
12	48.2	39.8	0.0
13	53.7	46.2	0.0
14	47.3	41.8	0.0
15	43.3	38.0	0.0

Source: Urban Crossroads 2008

[1] Refer to Figure 7B of the Noise Analysis (Appendix F) for the locations of the receptors.

[2] Barrier height in feet above pad or roadway elevation, whichever is greater to achieve maximum insertion loss.

Table 3.3-6
PROJECT PLUS CUMULATIVE CONTRIBUTIONS TO EXISTING NOISE LEVELS

Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Pine Street	Haverford Road to Ash Street	66.9	54	170	537	1,698
	Ash Street to Olive Street	68.1	71	224	708	2,239
	Olive Street to Main Street	68.1	71	224	709	2,242
10th Street	Main Street to H Street	67.1	57	179	566	1,789
Main Street	7th Street to 3rd Street	73.3	234	739	2,338	7,393
	10th Street to Montecito Road	74.1	284	899	2,842	8,986
	Montecito Road to Hunter Street	74.0	275	870	2,750	8,697
	Hunter Street to future Boundary Road	70.9	135	426	1,347	4,260
	Future Boundary Road to Highland Valley Road	70.9	135	426	1,347	4,260
	Highland Valley Road to Archie Moore Road	70.6	128	404	1,277	4,039
	Archie Moore Road to Poway Road	70.8	132	418	1,323	4,183
Montecito Way	Montecito Road to Montecito Ranch Road	59.3	9	30	95	299
Montecito Ranch Road	Western Project access point to Montecito Way	58.4	8	24	77	242
	Between main Project access points	57.5	6	20	62	197
Ash Street	Eastern Project access point to Pine Street	58.9	8	27	84	267
	Pine Street to Elm Street	52.7	2	6	20	65
Montecito Road	Montecito Way to Davis Street	62.5	20	62	197	623
	Davis Street to Main Street	63.9	27	85	269	851

Source: Urban Crossroads 2008

Table 3.3-7
EXISTING PLUS PROJECT PLUS CUMULATIVE CONDITIONS NOISE CONTOURS

Road	Segment	CNEL at 100 Feet (dBA)		
		Existing	Existing Plus Project Plus Cumulative	Cumulative Noise Level Increase
Pine Street	Haverford Road to Ash Street	65.1	66.9	1.7
	Ash Street to Olive Street	65.4	68.1	2.7
	Olive Street to Main Street	65.6	68.1	2.5
10th Street	Main Street to H Street	62.8	67.1	4.3
Main Street	7th Street to 3rd Street	72.1	73.3	1.2
	10th Street to Montecito Road	73.1	74.1	1.0
	Montecito Road to Hunter Street	72.8	74.0	1.2
	Hunter Street to future Boundary Road	69.6	70.9	1.3
	Future Boundary Road to Highland Valley Road	69.6	70.9	1.3
	Highland Valley Road to Archie Moore Road	69.1	70.6	1.6
	Archie Moore Road to Poway Road	69.3	70.8	1.5
Montecito Way	Montecito Road to Montecito Ranch Road	52.2	59.3	7.2
Montecito Ranch Road	Western Project access point to Montecito Way	DNE	58.4	-
	Between main Project access points	DNE	57.5	-
Ash Street	Eastern Project access point to Pine Street	51.4	58.9	7.5
	Pine Street to Elm Street	51.4	52.7	1.3
Montecito Road	Montecito Way to Davis Street	59.8	62.5	2.7
	Davis Street to Main Street	62.2	63.9	1.7

Source: Urban Crossroads 2008
DNE = does not exist

Table 3.3-8
NOISE LEVELS OF THE WRF –
WASTEWATER MANAGEMENT OPTION 2

Noise Source	Closest Distance to Property Line (in feet)	Reference Noise Level at 25 Feet (dBA)[1]	Unmitigated Property Line Noise Levels (dBA L_{eq})
Nearest Property Line to the East (Existing Residential Property)			
Control Building	460	67.0	41.7
Dewatering/Equipment	330	55.5	33.1
Process Area	290	50.0	28.7
CUMULATIVE LEVELS AT PROPERTY LINE (dBA)			**42.5**
Nearest Property Line to the West (Proposed Historical Park Site)			
Control Building	125	67.0	34.1
Dewatering/Equipment	200	55.5	37.4
Process Area	250	50.0	30.0
CUMULATIVE LEVELS AT PROPERTY LINE (dBA)			**39.6**
Nearest Property Line to the North (Charter School Site)			
Control Building	400	67.0	42.9
Dewatering/Equipment	400	55.5	31.4
Process Area	350	50.0	27.1
CUMULATIVE LEVELS AT PROPERTY LINE (dBA)			**43.3**
Nearest Property Line to the South (Existing Residential Property)			
Control Building	330	67.0	44.6
Dewatering/Equipment	325	55.5	33.2
Process Area	370	50.0	26.6
CUMULATIVE LEVELS AT PROPERTY LINE (dBA)			**45.0**

Source: Urban Crossroads 2008

[1] Reference noise level for the control building is dependent on the orientation of the building and the placement of the required acoustical louvers.

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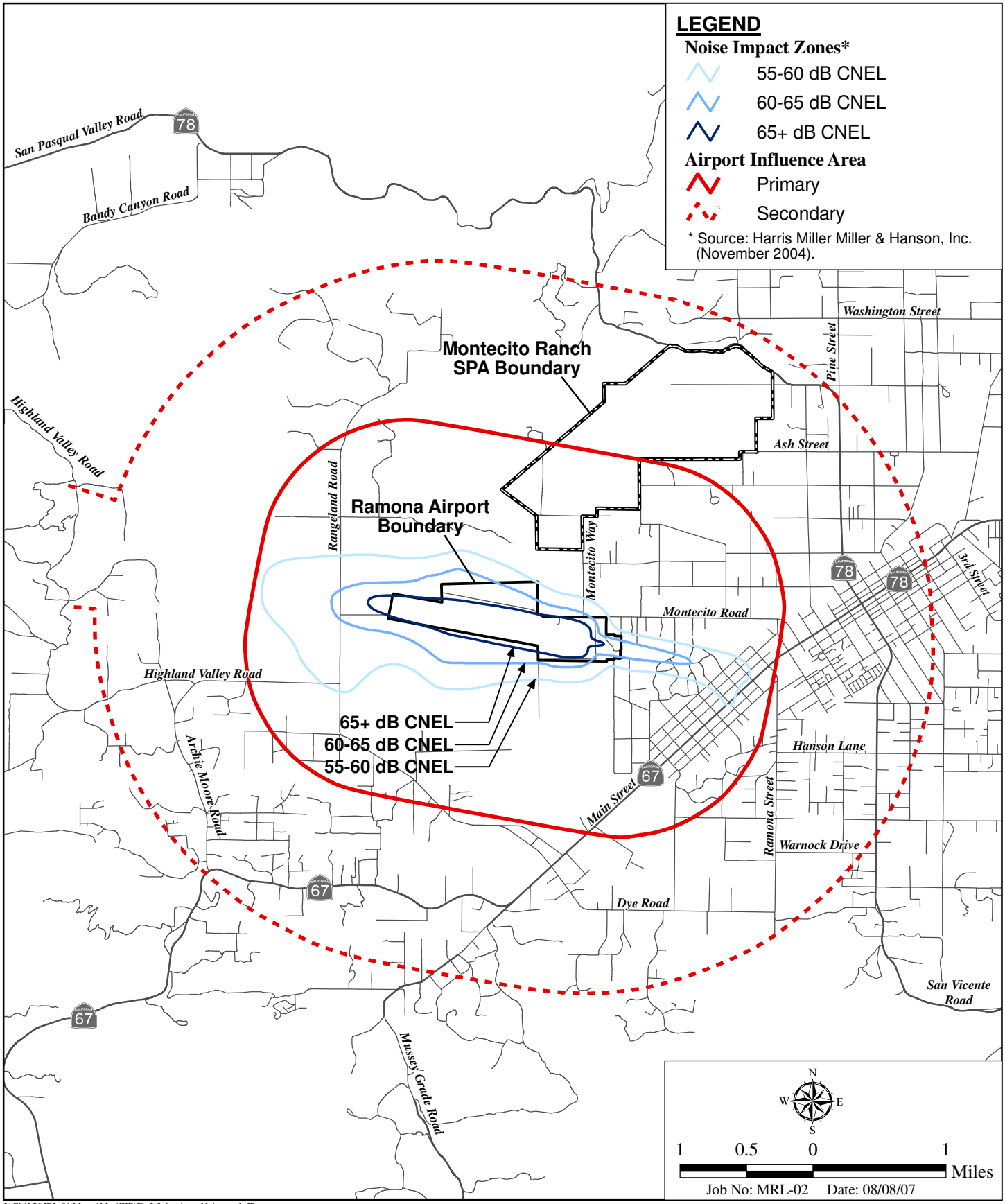

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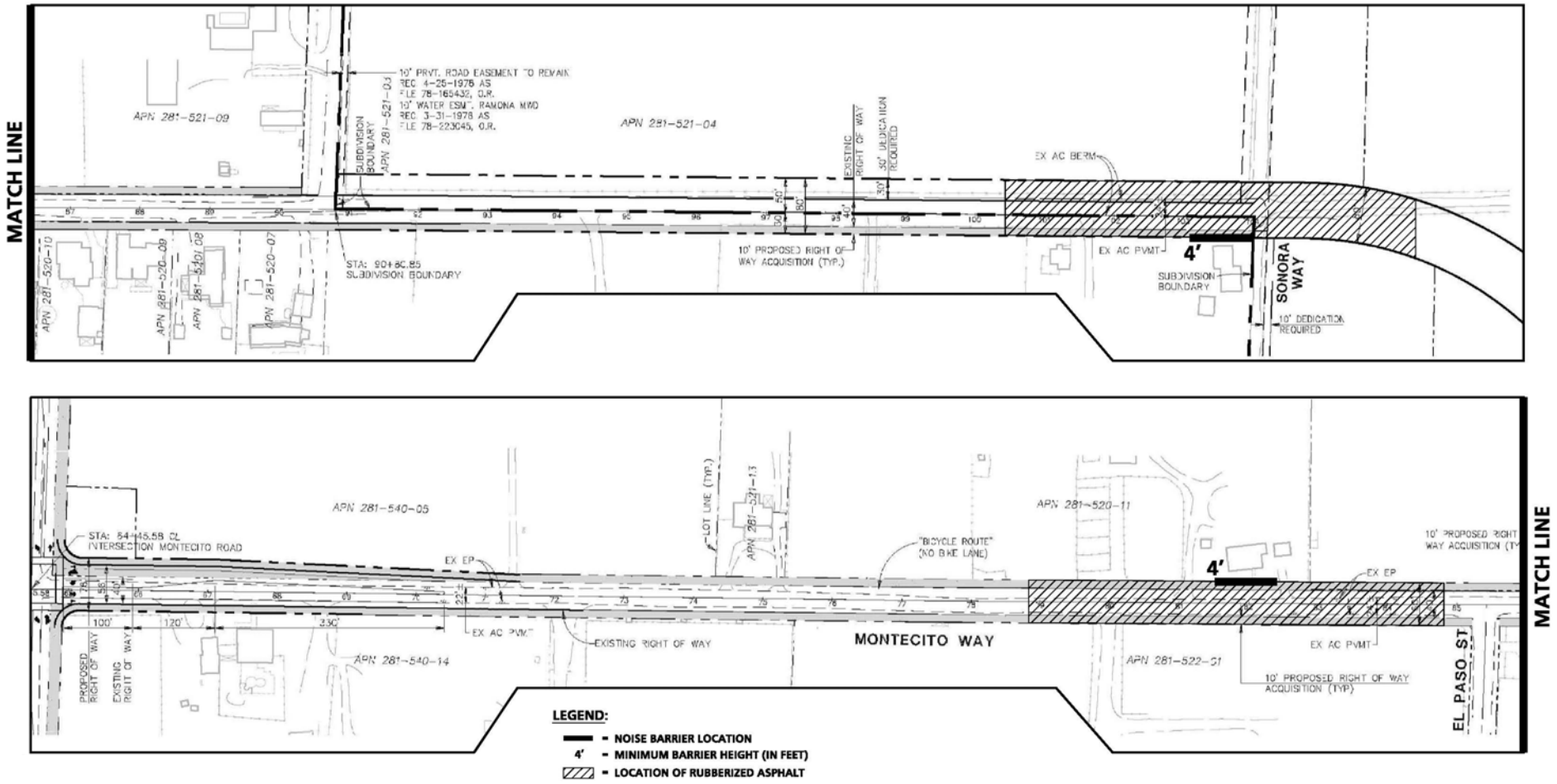
Noise Level Contours for Ramona Airport

MONTECITO RANCH - EIR

HELIX

Figure 3.3-1



Source: Urban Crossroads, 2008

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Location of Noise Walls Along Montecito Way

MONTECITO RANCH - EIR

Figure 3.3-2

HELIX